

MEMORANDUM

8 June 1970

TO: Dr.

FROM:

SUBJECT: Preliminary Proposal: "Non-Lethal Personnel Behavioral Control"

Four copies of a proposal, "Non-Lethal Personnel Behavioral Control," dated 15 May 1970, are submitted for your consideration. We would like to emphasize that the exploratory nature of the work proposed makes it important that the task descriptions and manpower allocations outlined in our proposal be considered flexible within the framework of funding and manpower available. Some degree of flexibility is necessary to avoid wasting effort on techniques that prove to be impractical and to permit follow-through on promising approaches to non-lethal personnel behavioral control.

NON-LETHAL PERSONNEL
BEHAVIORAL CONTROL

15 May 1970

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NON-LETHAL PERSONNEL
BEHAVIORAL CONTROL

The [proposes to provide medical and psychological evaluation, advice and guidance to support development of behavioral control systems being fabricated and tested by other concerns and/or to recommend the development or abandonment of plans to undertake research and development concerned with potential behavioral control systems. This service is to be rendered during the contract period of 1 July 1970 to 30 June 1971, subject to modification if the contract objectives would be better served by a change in the contract time period. A proposed budget for the contract is detailed in Table I of this proposal.

TASKS

The proposed tasks are described below. Contract work is to be performed by the medical, para-medical and technical staffs of appropriate departments [principally the Departments of Experimental Psychology and Physiology, Comparative Environmental Biology and Biological Instrumentation. Existing facilities will be used for classified storage and communications, as appropriate. Clinical consultations from appropriate [specialists will be obtained as indicated if clearances are granted or the subject material can be discussed at an unclassified level. Key personnel in

[already hold clearances
at the SECRET level or higher.

I. Evaluation of On-Going Projects.

Evaluation of status, progress and potential of on-going projects being

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conducted by other organizations. These projects are aimed at developing such approaches as intense light and adhesive materials as behavioral control systems.

30% of research effort

Informal and formal Progress Reports due: intermittently, when requested or indicated.

II. Evaluation of the Scientific Literature in "Soft Impact" Projectiles

Evaluation of the currently available literature and recent research efforts in order to determine the feasibility of developing a "soft impact" projectile as a part of a behavioral control system.

20% of research effort

Progress Report due: 28 February 1971.

III. Evaluation of Potential Behavioral Control Techniques

Evaluation of diverse approaches, such as electrical shock, infra-sound, nets, as potential methods of temporary incapacitation.

30% of research effort

Progress Report due: 30 June 1971.

IV. Supporting Laboratory Studies

Exploratory laboratory studies involving experimental animals will be conducted, as appropriate, in support of Tasks I - IV if data from such studies are necessary to supplement information from other sources in order to arrive at an evaluation of a potential behavior control system.

20% of research effort

Reports due: upon completion of studies.

ADDITIONAL ACTIVITIES

Briefings and support functions such as security, communications, personnel management, travel (especially in the early phases of operation)

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and administrative activities will be necessary. Such activities are estimated to require about 20% of available professional manpower. The remaining 80% of professional manpower will be apportioned to the four tasks as indicated above.

TABLE I. BUDGET ESTIMATE

for

Proposal Dated 15 May 1970

Description	Man Years	Amount
<u>Salaries</u> *		
Dr.	0.10	\$
Dr.	0.10	
Dr.	0.30	
Associate Staff Members	0.50	
Technical Staff Members	0.50	
		—
		\$

Supplies:

Office supplies, communications, books,
library services, laboratory supplies,
experimental animals including maintain-
ance

Services - Consultants:

Appropriate hours at Specialists, 40 ✓

Travel:

Fringe Benefits at 12% of salaries (rounded):

Overhead at 43% of salaries (rounded):

* Includes leave benefits and bonus compensation.

25 September 1968

MEMORANDUM FOR:

SUBJECT :: Meeting with Dr.

1. As I mentioned to you earlier this week I had conversations at Mr. [redacted] /request with Dr. [redacted] concerning animal training. In going over my notes from the trip, I found some things I didn't mention to you; therefore, I'll summarize my meeting with him in this memo.
2. As you will recall, [redacted] has done guided animal work on donkeys and rats. He said that in doing his literature search on the project, he came across work done in Sweden in World War II in which seals were trained to attach explosives to submarines. He recalled that the harness for the seal had been one of the main problem areas. Further, he said dogs had been trained in World War I to go to tanks for a food reward.
3. In his own work with donkeys and rats, he found the following using electrical stimulation of the brain:
 - a) negative reinforcement in all cases caused panic reaction and was not useful
 - b) an intermediate level brain stimulation was the only useful one (you could overdo the pleasure reaction)
 - c) with rats the attention span was so short (less than 1 sec.), that you needed to give immediate reinforcement (less than 1 sec.). By doing this you could train the rat in less than 10 minutes.

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d) for guidance, he needed a "logical and" in the circuitry, i.e., the animal must have the right heading and have forward motion

e) a maximum response rate at 60-100 cps for the donkey

f) the animal gives the response you ask for and not necessarily what you want or expect, thus your questions to it must be framed very carefully.

4. While preparing to get into the animal work, Dr. spent 2 weeks with He realizes you must take [with a grain of salt, but while he was at the was convinced of the following:

a) [had found pleasure centers in the brain and could stimulate them by electrical shock

5. I'm sure you would find Dr. very stimulating. The next time he is in town, I hope that you can find time to have some discussions with him.